



Re: new Class II guidance on seismic risk ? 📎

Jill Dean to: bmordick

Bcc: MaryRose Bayer, kobelski.bruce

02/22/2012 05:11 PM

Hi Briana,

The Underground Injection Control National Technical Workgroup is working on a technical report that describes approaches UIC regulators could consider to minimize the likelihood of injection-induced seismicity for Class II injection wells that receive oil and gas production wastewaters. (The Workgroup membership is made up of EPA Regional UIC staff and selected state UIC staff and they address technical issues rather than policy.) The report is still being developed and we expect it will be available to the public later in 2012.

Thanks,

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----- Forwarded by MaryRose Bayer/DC/USEPA/US on 02/22/2012 04:30 PM -----

From: "Mordick, Briana" <bmordick@nrdc.org>
To: MaryRose Bayer/DC/USEPA/US@EPA
Date: 02/22/2012 04:25 PM
Subject: new Class II guidance on seismic risk?

Hey Molly,

Hope you're well! Just saw this article in Inside EPA. Not sure if you're working on this issue, but was wondering if you knew any more about what this guidance will look like or what the timing is?

Best,
Briana

EPA Said To Craft Guide On Seismic Effects Of Fracking Wastewater Wells

Posted: February 21, 2012

EPA is said to be developing guidance for states on how to mitigate potential seismic risks associated with underground injection control (UIC) wells used to dispose of wastewater generated during hydraulic fracturing following an uptick in earthquake activity in Ohio believed to be caused by disposal operations.

The move may fall short of environmentalists' calls for EPA to reverse a long-standing regulatory exemption excluding oil and gas wastewater from the definition of hazardous waste in an effort to force stricter regulation of the disposal practice.

In particular, activists had urged EPA to reverse its 1988 determination that most drilling wastes, including produced water, should be exempt from subtitle C hazardous waste rules under the Resource Conservation and Recovery Act (RCRA). Reversing the determination would force disposal of the wastewater in more strictly regulated hazardous waste disposal wells -- known as Class I wells in EPA's UIC program -- rather than as Class II wastewater disposal wells, whose rules do not currently require consideration of possible seismic effects.

But Mike Paque, executive director of the Ground Water Protection Council (GWPC), a group of state regulators, told a Feb. 15 teleconference, "Hydraulic Fracturing, Facts, Frictions, and Trends," sponsored by Bloomberg BNA that EPA is crafting a report on the recent Ohio activity that will provide guidance for states and regional offices to improve

their considerations of seismic activity when permitting and maintaining Class II wells for oil and gas.

He said EPA is not expected at this time to propose any regulatory changes.

Environmentalists and others are concerned that massive increases in the amount of wastewater generated and injected in UIC wells, a product of the tremendous shale gas boom, may trigger more seismic problems if EPA does not move to tighten the regulations governing waste from oil and gas operations.

But industry and EPA maintain that injection of wastewater into Class II wells is the preferred method for disposing of produced water -- the briny water dredged up from underground during the fracking process, and flowback, the injection fluid that flows out of the well after the fracture.

The disposal practice is used largely throughout the natural gas industry, except for limited exceptions in portions of northeast shale formations where geology limits the ability to drill UIC wells.

But the practice came under fresh scrutiny after the Ohio Department of Natural Resources (DNR) late last year halted disposal operations at a Youngstown Township Class II injection well used for wastewater generated from nearby fracking operations, and four other disposal wells, following a series of 11 low-level seismic occurrences, including one magnitude 4.0 earthquake.

Groundwater Concerns

Former EPA water chief Benjamin Grumbles said during the Feb. 15 teleconference that seismicity concerns due to fracking are getting pushed to the forefront as states struggle to keep pace with disposal options for the large amounts of wastewater generated by the natural gas industry.

"One of the things we have to talk about is the UIC program and how it might trigger earthquakes if" the disposal process is rushed or involves too heavy volumes, Grumbles said. The large amounts of wastewater being disposed is continuing to drive concerns that groundwater is being adequately protected, "particularly in seismic zones," Grumbles added.

But Tom Tomastik, of DNR's division of oil and gas, argued that policymakers should retain the current regulatory approach. "Class II is still the best disposal practice," said during a Feb. 15 teleconference, "Hydraulic Fracturing, Facts, Frictions, and Trends," sponsored by Bloomberg BNA. "We are seeing increased movement afoot for additional regulations to be put into place, and possibly additional reviews by regulators."

And GWPC's Paque said that Ohio DNR would also be releasing a draft report analyzing its own findings from the Youngstown wells. "This is newly arrived on the radar screen," Paque said. "Probably the EPA effort is the premiere effort."

In the wake of the Ohio incidents, environmentalists have stepped up their efforts to reverse EPA's regulatory determination. Last month, shortly after the Ohio incidents, Natural Resources Defense Council (NRDC) met with EPA officials to advocate for its 2010 petition formally asking the agency to end the RCRA subtitle C determination. A source at the meeting told *Inside EPA* that subjecting drilling wastes to strict hazardous waste rules would force a greater consideration of seismic impacts pre-disposal because they would have to be disposed of in Class I injection wells. Under the UIC program, Class I hazardous waste disposal wells carry requirements that include analyzing the seismic zone prior to siting a well, a process which is not required under the Class II rules, according to the environmentalist source.

The Ohio situation has also caught the attention of key Democratic lawmakers. Last month, Sen. Frank Lautenberg (D-NJ), chair of the Senate Environment & Public Works Committee's Superfund panel, asked U.S. Geological Survey (USGS) () to conduct an investigation into the seismic risks associated with the disposal practice. -- *Bridget DiCosmio*

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